| Work | Order | · ID | 58832 |
|------|-------|------|-------|
| | Oluvi | 117 | 20022 |





Page 1

Wednesday, May 19, 2010 1:07:41 PM Item ID: D3641-3 **Revision ID:** Item Name: Cover Start Qty: 6.00 **Start Date:** 5/19/2010 **Required Date: 5/26/2010** Req'd Oty: 6.00 Reference: Process Plan: Approvals: QC: Sequence ID/ Operation Work Center ID

| Accept | ŀ |
|--------|---|
| | |
| | |



Setup Start

Stop

Cust Item ID:

Customer:

Draw

Number

Date: 10-5-19

Date:

Tooling:

SPC (Y/N):

Set Up/

Run Hours

Date:

Run Start



Date:

Draw

Rev.

Stop

Description Draw Nbr **Revision Nbr** D3641 Rev C 100

Waterjet

FLOW WATER JET Memo

0.00

B10-6-3

FLOW CNC Waterjet 5057.037

1-Cut as per Dyg D3641 Dwg Rev:

Prog Rev: 2-Deburr if necessary 0.00

110

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

B10-6-2

Quality Control

120

QC8- Inspect parts - second check

Quality Control

Memo

Plan

Accept Code **Qty**

Reject Qty

Reject Number

Insp. Stamp

| W/O: | | | WO | RK ORDER CHANG | ES | | | | | |
|-------------|--------------------------|-------------------|-------------------------------------|------------------------------|------|-------------|-------|-------------------------------|--------------------------|--------------|
| DATE | STEP PROCEDURE CHANGE By | | | | | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | : | | | | | | |
| | | | | | | | | | | |
| Part No | · | PAR #: | Fault Categ | jory: | _ NC | R: Yes | No DQ | A: | Date: | |
| | | solution: | | | | | | | | |
| NCR: | | | WORK ORDE | R NON-CONFORM | ANCE | (NCR | 3) | | * | |
| DATE | STEP | Description of NC | Description of NC Corrective Action | | | Ve | | | Approval | Approval |
| DAIL | SILF | Section A | Initial Chief Eng | Action Description Chief Eng | | Sign & Date | | ion C | Chief Eng | QC Inspector |
| | | | | | Ť | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

0.00

0.00

Quality Control

Chemical Conversion Coat per QSI005 4.1

Memo

150

HandFinish

Hand Finishing

Page 2

m 10 06

| W/O: | | | WC | RK ORDER CHANGI | ES | | | |
|---------|------|-------------------|----------------------|------------------------------|----------------|--------------|-------------------------------|--------------------------|
| DATE | STEP | PRO | OCEDURE CHAI | NGE | Ву | Date Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |
| | | | | *** | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Part No | : | PAR #: | Fault Cate | jory: | NCR: Yes | No DQA: | Date: _ | |
| | | solution: | | | | • | | |
| NCR: | | | WORK ORDE | R NON-CONFORMA | NCE (NCR |) | · •. | |
| DATE | STEP | Description of NC | <u> </u> | Corrective Action Section | | Verification | Approval | Approval |
| | J.E. | Section A | Initial Chief Eng | Action Description Chief Eng | Sign & Date | Section C | Chief Eng | QC Inspector |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | · | | |
| | | · | | | | · | | |
| | | | | | | | | |
| | | | | • | | | | |
| | | | | | | | | |

Work Order ID 58832

Wednesday, May 19, 2010 1:07:41 PM



Page 3

Item ID:

D3641-3

Accept

Setup Start



Revision ID:

Start Date:

Item Name:

Required Date: 5/26/2010

Cover

5/19/2010

Start Qty: 6.00

Req'd Qty: 6.00



Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan:

Date:_____

Tooling:

Date:

Run

Start

Stop



Date: _____

SPC (Y/N):

Date:

Draw

Rev.

Plan

Code

Stop

Reject

Qty

Insp.

Stamp

Sequence ID/ **Work Center ID**

160

OC

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ **Run Hours**

0.00

0.00

Accept

Qty

Bl 10-6-22

170

Packaging

Packaging

Identify as per dwg & Stock Location: 57260

Memo

0.00

Reject

Number

180

0.00

Memo

QC21- Final Inspection - Work Order Release

0.00

10/06/23.

Quality Control

| W/O: | Y | | . W(| ORK ORDER CHANG | ES | | | | | |
|---------|----------|-------------------|----------------------|------------------------------|---------|----------------|--|------------------------|-----------|--------------------------|
| DATE | STEP | PRO | OCEDURE CHA | NGE | I | Зу | Date Qty Approval Chief Eng / Prod Mgr | | | Approval QC Inspector |
| | | | | | | | - | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Part No | • | PAR #: | Fault Cate | gory: | _ NCR: | Yes N | o DQ | ۸: | Date: | |
| | R | esolution: | Dispositio | n: | _ QA: N | I/C Clos | sed: | | Date: _ | · |
| NCR: | | 1 | WORK ORD | ER NON-CONFORMA | NCE (| NCR) | | | | |
| DATE | STEP | Description of NC | | Corrective Action Section | | | Verific | ication Approval Appro | | Approval |
| | 0.2. | Section A | Initial Chief Eng | Action Description Chief Eng | , | Sign & Date | Section | on C | Chief Eng | QC Inspector |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | : | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | į | | | | | |
| | | | | | | | 3 | | | |
| | | | · | | | | | | | |

Picklist Print

Wednesday, May 19, 2010 1:07:45 PM

Work Order ID: 58832

D3641-3

Parent Item:

Component Item ID/

Parent Item Name: Cover

Comments:

Item Name

M5052H32S.032

5052-H32 .032 Sheet

IPP Rev:A New Issue 07-07-20 JLM

Verified By:EC IPP Rev:B ECN 1050 rev.b as per dwg 08-01-10 DD

Replacement Mfg/

Item ID Purch Purchased

Bin **Primary** Item Location No

Last Location Route Seq ID 100

Unit of Measure sf

Qty on Hand 67.5000 Qty per Kit Qty

Start Date: 5/19/2010

0.7851

Start Qty: 6.00

Issued 5.5 Status

Page 1

B 10-6-2

Required Date: 5/26/2010

Required Qty: 6.00

Date

Issued

| Location | Loc Oty | Loc Code | |
|-----------------|---------|----------|--------|
| MAT23 | 67.5 | | |
| 100470 | 3 | | |
| 103321 | 3 | | |
| 105998 | 7 | | |
| 108462 | 10 | | - |
| 109478 | 9 | | |
| 111448 | 3 | | |
| 112664 | 29.5 | | 112664 |
| 15031 | 3 | | |

| W/O: | | | WC | RK ORDER CHANG | iES | | | | | |
|---------|------|-------------------|----------------------|------------------------------|-----------|------------|---------------|-------------|-------------------------------------|--------------------------|
| DATE | STEP | PR | OCEDURE CHA | NGE | Ву | , | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Part No | • | PAR #: | Fault Cate | gory: | _ NCR: Y | es N | o DQ , | A : | _ Date: _ | |
| | Re | solution: | Disposition | n: | _ QA: N/0 | Clos | sed: | | Date: _ | |
| NCR: | | | WORK ORDI | ER NON-CONFORM | ANCE (N | CR) | | | | |
| DATE | STEP | Description of NC | | | ion B | | | | Approval | |
| | | Section A | Initial Chief Eng | Action Description Chief Eng | | n & ate | | | Chief Eng | QC Inspector |
| | | | | | | | | | | |
| | | | | | | | | | | |
| - 11 | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | * | | |
| | | | | | | | | | | |
| | | , | | | | | | | | |
| | | | | | | | | | | |

| DART AEROSPACE LTD | Work Order: | 58832 |
|------------------------------|--------------|-------------|
| Description: Cover | Part Number: | D3641-3 |
| Inspection Dwg: D3641 Rev: B | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

| X | First Artic | le | Proto | type |
|---|-------------|----|-------|------|
| | Actual | | | |

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|----------------------|---------------|---------------------|--------|--------|-------------------------|----------|
| Ø0.191 | +0.005/-0.001 | 193 | 100 | | | |
| 0.50 | +/-0.030 | ,50) | × | | | |
| 4.78 | +/-0.030 | 4.774 | g | | | |
| 0.84 | +/-0.030 | - 839 | مر | | | |
| 0.90 | +/-0.030 | .90 | Yer . | | | |
| 12.42 | +/-0.030 | 12.42 | iv. | - | | |
| 22.42 | +/-0.030 | 22.42 | _ | | | |
| 24.00 | +/-0.030 | 24,02 | 5 | | | |
| 24.84 | +/-0.030 | 2484 | 10- | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | - | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | - | | _ | | |
| | | | | - | | |

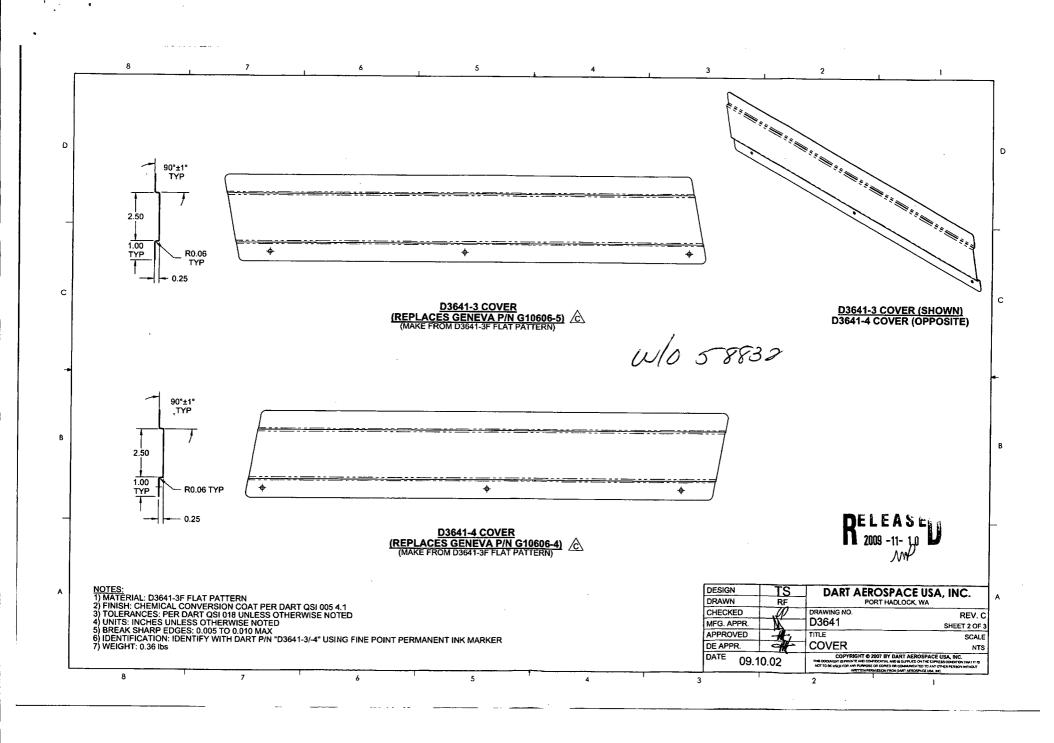
| | | r | | | |
|--------------|--------|-------------|----------|---------------------|-----|
| Measured by: | B | Audited by: | S | Prototype Approval: | N/A |
| Date: | 10-6-2 | Date: | 10/0/03 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|-----------|------------|----------|
| Α | 08.12.01 | New Issue | KJ/EC/DD | |
| | | | | |

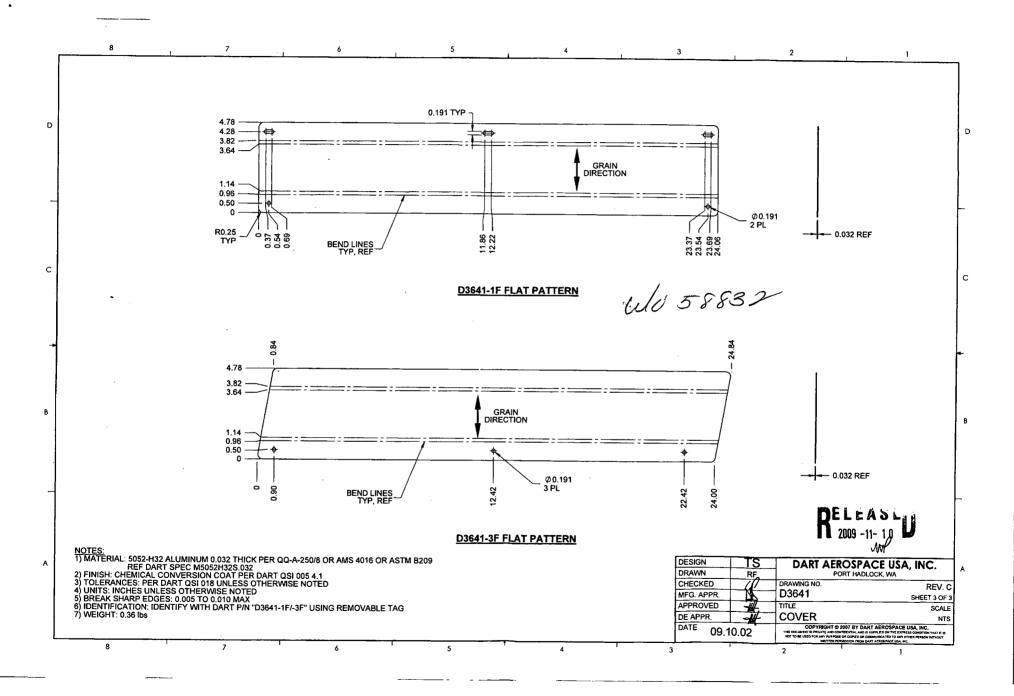
| W/O: | | | W | ORK ORDER CHANG | ES | | | | |
|-------------|-----------|-------------------|-----------------------------|------------------------------|-----------------------|--------------|--|-------------------------------------|--------------------------|
| DATE STEP | | PROCEDURE CHANGE | | | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | 4 | |
| | | | | | | | The state of the s | | |
| Part No | : | PAR #: | Fault Cate | egory: | NCR: Yes | No DQ | A : | Date: | |
| Resolution: | | | Disposition | _ QA: N/C Clo | QA: N/C Closed: Date: | | | | |
| NCR: | | | WORK ORD | ER NON-CONFORMA | NCE (NCR |) | | | |
| DATE | STEP | Description of NC | Corrective Action Section B | | | Verific | ation | Approval | Approval |
| | Section A | | | Action Description Chief Eng | Sign & Date | Section C | | Chief Eng | QC Inspector |
| | | | | | | | | | |
| | | | | | | | | ! | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

8 SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COMM SUBJECT TO AMENDMEN WITHOUT NOTICE WORK ORDER NO 58832 B\$10-5-19 90°±1° 3.50 2.50 R0.06 TYP 0.25 ---**D3641-1 COVER** (REPLACES GENEVA P/N G10606-3/-6) (MAKE FROM D3641-1F FLAT PATTERN) RELEASE 2009 -11- 1 A REFORMAT DRAWING TO CURRENT STANDARDS; D3641-3 WAS -4 (ZN C4-2); ADD D3641-4 VIEW (ZN A4-2); MOVE -1F/-3F FLAT PATTERN TO SHEET 3. PER NCR 09-076 09.10.02 UPDATE PROFILE TO MATCH TOOLING; GENERAL UPDATE LE 07.10.16 A NEW ISSUE; REPLACES G10606 ĹĔ 07.07.27 REV. NOTES:
1) MATERIAL: D3641-1F FLAT PATTERN
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED DESCRIPTION DATE DESIGN DART AEROSPACE USA, INC. DRAWN RF CHECKED DRAWING NO. REV. C 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1" USING FINE POINT PERMANENT INK MARKER D3641 MFG, APPR. SHEET 1 OF 3 APPROVED TITLE SCALE 7) WEIGHT: 0.35 lbs DE APPR. **COVER** NTS DATE COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. 09.10.02

| W/O: | | | W | ORK ORDER CHANG | ES | | | |
|-------------|------|-------------------|----------------------|------------------------------|----------------|-----------------|-------------------------------|--------------------------|
| DATE | STEP | PRO | PROCEDURE CHANGE | | | Date Qt | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | · | | | | | | |
| Part No | • | PAR #: | Fault Cate | gory: | NCR: Yes | No DQA : | Date: _ | |
| Resolution: | | | Dispositio | QA: N/C Clo | Date: _ | | | |
| NCR: | | \ | WORK ORD | ER NON-CONFORMA | NCE (NCR |) | | · - |
| DATE | STEP | Description of NC | | Corrective Action Section | | Verification | n Approval | Approval |
| DATE | SIEP | Section A | Initial Chief Eng | Action Description Chief Eng | Sign & Date | Section C | Chief Eng | QC Inspector |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |



| W/O: | | | WC | RK ORDER CHANG | ES | | | | |
|-----------|------|-----------------------------|----------------|------------------------------|---------|---------|--------------|-------------------------------------|--------------------------|
| DATE STEP | | PROCEDURE CHANGE | | | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | • | 1.5 |
| | | | | | | | | | |
| | | | | | | | | | |
| Part No | : | PAR #: | Fault Cated | norv: | NCR: Ye | s No DO |) A : | Date: | |
| | | | Disposition: Q | | | | | | |
| NCR: | | | | ER NON-CONFORM | | | | | |
| DATE | STEP | Description of NC Section A | Initial | tion B | | cation | Approval | Approval | |
| | | SectionA | Chief Eng | Action Description Chief Eng | Dat | | tion C | Chief Eng | QC Inspector |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | - |



| | Dart | Aero | space | Ltd |
|--|------|------|-------|-----|
|--|------|------|-------|-----|

| W/O: | | | V | VORK ORDER CHAN | NGES | | | | | |
|-----------|------|-------------------|-----------------------------|-----------------------------|-------|-----------------------|--------------|------------|-------------------------------|--------------------------|
| DATE STEP | | PROCEDURE CHANGE | | | | Ву | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | • | | | , | | | |
| | | | | | | | | | | |
| | | | | | | | | <u> </u> | | |
| | | | | | | | | | | |
| | : | | | | | | | | , , | |
| Part No | : | PAR #: | Fault Ca | tegory: | NCR: | : Yes | No DQ | 4 : | _ Date: _ | |
| | | | Disposition: Q | | | QA: N/C Closed: Date: | | | | |
| NCR: | | | WORK OR | DER NON-CONFORI | MANCE | (NCR |) | | | |
| DATE | STEP | Description of NC | Corrective Action Section B | | | **** | Verific | ation | Approval | Approval |
| DAIL | 3127 | Section A | Initial Chief Eng | Action Descriptio Chief Eng | n | Sign & Date | | on C | Chief Eng | QC Inspector |
| , | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | - | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | I | I . | 1 | ì | 5 | | 1 | | | |